Degenerate primers were made which corresponded to the protein sequence deduced above. These were 5'GC(N)TC(N)GA(AG)CT(N)CT(N)GA(AG) 3' (SEQ ID NO:3) and 5'TT(TC)AT(N)TC(N)TC(N)TC(N)GT(N)GG(N)3' (SEQ ID NO:4). These primers were used to amplify a cDNA made from ΔSCIP Schwann cells, and a ~1.1 kb product was generated. The PCR condition were 94°C for 1 minute, followed by 40 cycles of 94°C for 30 second, 54°C for 3 minutes and 72°C for 1 minute, followed by 72°C for 5 minutes. The PCR product was the cloned using a TA cloning kit (Invitrogen), and sequenced. The cloned OPA1 fragment was then used to screen a mouse brain library (Stratagene) and a human fetal brain library (Clontech). All cloning was done as described (Weinstein *et al.*, 1991), except the probe was generated by random priming instead of nick translation. All sequencing was carried out by automated sequencing on an ABI 310 automated sequencer.

In the Claims:

Please rewrite Claims 3, 7, 16, 18, 21, and 23 as follows:

3. (twice amended) The isolated nucleic acid of Claim 1 comprising the nucleotide sequence of nucleotides 880-1680 of SEQ ID NO:2.

7. (twice amended) An isolated nucleic acid that hybridizes under high stringency conditions to a nucleic acid that is complementary to the nucleotide sequence of SEQ ID NO:2 or a contiguous fragment thereof, wherein said isolated